

March 9, 2010

Chairman Julius Genachowski  
Commissioner Meredith Attwell Baker  
Commissioner Mignon Clyburn  
Commissioner Michael J. Copps  
Commissioner Robert M. McDowell  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: GN Docket No. 09-191

Dear Chairman Genachowski and Commissioners:

As Director of the Center for Telehealth at the Medical College of Georgia, where I am also a Professor in the schools of Medicine, Nursing, and Allied Health, I am afforded a broad view of the potential role for technology to revolutionize U.S. healthcare.

Tele-technology's potential benefits are boundless and have been documented in many publications. Two summary overviews have come from the Alliance for Public Technology, an organization with which I have been associated as a Board member and Board president (*A Broadband World: The Promise of Advanced Services*, December 2003; and *Broadband Initiatives: Enhancing Lives and Transforming Communities*, November 2007). More recently, a *Forbes* article ("The Return of the House Call", January 11, 2010) describes an online video-streaming service that allows doctors and nurses in separate offices to simultaneously evaluate and diagnose patients, while speaking with them. The February 2010 issue of the journal *Telemedicine and e-Health* presented an article on mobile health, or m-health, which uses mobile devices to wirelessly link mobile populations with the healthcare system to exchange health related information and provide health related education.

These and other examples that are proliferating around the country hold the potential for facilitating the most effective healthcare advance in a generation. However, from the Commission's perspective, it is critically important to recognize that almost all of these applications and programs rest on a common foundation: A universally accessible and reliable communications systems.

Whether the application is called telemedicine, telehealth, e-health, or m-health, it depends upon a high-speed network that can transport large amounts of data to enable real-time diagnosis and on-going disease management. Increasingly, required functionality includes converged voice, video and data capabilities.

For proper healthcare, managed networks provide more than just a benefit. They can be the vital links in life-threatening circumstances. This is why I am concerned about rules that would prohibit Quality of Service options, thereby putting at risk much of the basis of telemedicine and

telehealth success by allowing the video stream of a mentored surgical procedure to be held to the same speed as a P2P movie swap because both are considered "video", or by lumping high-definition x-rays in the same category as photo-sharing services because both are "photographs"?

Two years ago, an advisory committee created by Congress to look at emerging healthcare issues, including telemedicine and telehealth, concluded that:

"Packet loss, delays in packet transmission ('latency'), and inconsistent packet delivery interval times ('jitter') have significant impact on a variety of emerging real-time health care applications. To reduce latency and jitter, managed networks are generally needed that can prioritize real-time (and potentially life-saving) communications ahead of packets used for file transfer and e-mail." [Joint Advisory Committee on Communications Capabilities of Emergency Medical and Public Health Care Facilities, February 2008, p. 47] The report further stated that healthcare services, including EMS, increasingly "can only perform well on well-designed managed networks with sufficient bandwidth...."

As telemedicine and telehealth options continue to grow, these observations become increasingly self-evident. I respectfully request that you not support regulatory efforts that interfere with dynamic network management capabilities that are necessary for effective telemedicine and telehealth activities.

Thank you for your consideration.

Sincerely,



Max E. Stachura, MD

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and Allied Health  
Medical College of Georgia

Georgia Research Alliance  
Eminent Scholar in Telemedicine